

**Gulf Coast Ecosystem Restoration Science, Observation,  
Monitoring, and Technology Program**



# **NOAA RESTORE Act Science Program**

**2014 Gulf Coastal Management and NERR Workshop**

**February 26, 2014**

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# Outline

- Program overview
  - Legislation
  - Funding
  - Vision, mission, goals, focus areas
  - Recent and future program actions
- Questions
- Discussion



# What is the Program?

- RESTORE Act of 2012
  - Section 1604 authorizes NOAA to establish a Gulf Coast Ecosystem Restoration Science, Observation, Monitoring, and Technology Program (NOAA RESTORE Act Science Program)

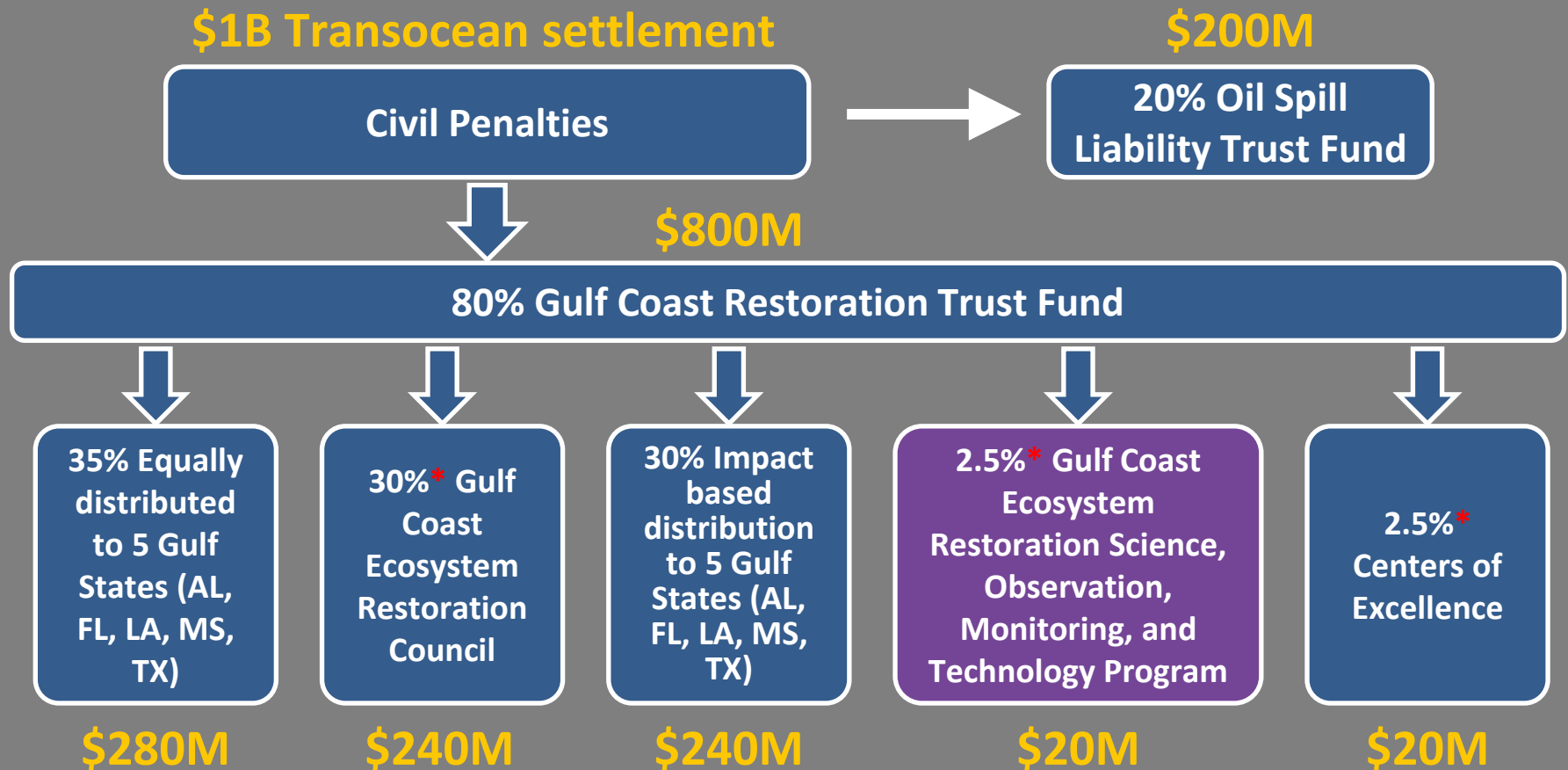
*“...to carry out research, observation, and monitoring to support, to the maximum extent practicable, the long-term sustainability of the ecosystem, fish stocks, fish habitat, and the recreational, commercial, and charter fishing industry in the Gulf of Mexico.”*



# Legislative Requirements

- **Coordinate with the United States Fish and Wildlife Service (USFWS)**
- **Consult with Gulf States Marine Fisheries Commission (GSMFC) and Gulf of Mexico Fishery Management Council (GMFMC)**
- **Priority shall be given to integrated, long-term projects that address management needs**
- **Funds may not be used for**
  - any existing or planned research led by NOAA,
  - implementation or initiation of new NOAA regulations, and
  - development of or approval of a fisheries catch share program.

# Distribution of Clean Water Act Civil Penalties per the RESTORE Act



\*Supplemented by interest generated by the Gulf Coast Restoration Trust Fund

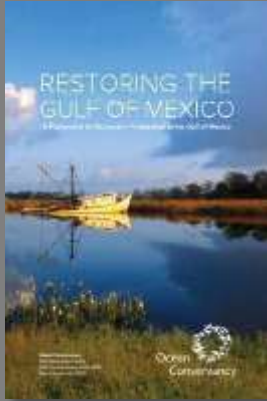
(50% to Gulf Coast Ecosystem Restoration Council, 25% to Science Program,

25% to Centers of Excellence)



# Building the Science Program on a Strong Foundation

## *Science Planning, Engagement, and Coordination*



**The Ocean  
Conservancy**



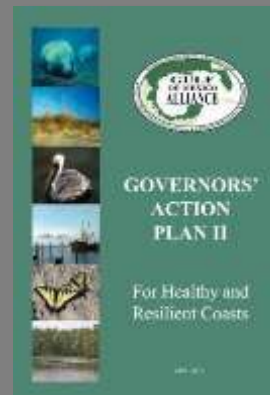
**The Gulf Coast  
Ecosystem  
Restoration  
Task Force**



**Louisiana  
Comprehensive  
Master Plan**



**Sea Grant  
Research  
Plan**



**Gulf  
Governors  
Action Plan**



**Florida Ocean  
Council –  
Annual Science  
Research Plan**

The direction of the program has and will continue to be informed by stakeholder input, existing plans and activities addressing the Gulf of Mexico ecosystem, and by the science needs of our partners.



# Vision and Mission

## Vision

*Long-term sustainability of the Gulf of Mexico ecosystem and the communities that depend on it.*

## Mission

*To initiate and sustain an integrative, holistic understanding of the Gulf of Mexico ecosystem and support, to the maximum extent practicable, restoration efforts and the long-term sustainability of the ecosystem, including its fish stocks, fishing industries, habitat, and wildlife through ecosystem research, observation, monitoring, and technology development.*

# Goals



- Support the science necessary for better understanding and management of the Gulf of Mexico ecosystem, specifically:
- healthy, diverse, sustainable, and resilient **estuarine, coastal and marine habitats**
  - healthy, diverse, sustainable, and resilient **coastal and marine resources, including fisheries**
  - resilient and **adaptive coastal communities.**



# Focus Areas



**“Ecosystem processes, functioning and connectivity” through integrative field and laboratory studies**



**“Holistic approaches to observing & monitoring” with advanced technologies to monitor fisheries & other natural resources, & data integration tools focused on the observing needs in the Gulf of Mexico**



**“Integrated analysis and synthesis of existing and new data” to advance the state of ecological knowledge through the search for patterns and principles**



**“State of Health” of the Gulf, incorporating environmental, socio-economic, & human well-being benefits & elements**



# Short-term Priorities

- Comprehensive inventory and assessment (i.e., strengths/weaknesses) of ongoing ecosystem modeling efforts (conceptual and quantitative);
- Identification of currently available health/condition indicators of Gulf of Mexico ecosystem components, including humans, followed by comparative analysis of strengths and weaknesses and design/testing of additional indicators;
- Assessment of monitoring and observation needs and development of recommendations to build off existing assets to establish a Gulf wide monitoring and observation network.

# 2013 Program Actions

2013

- Jun
  - Website launch
  - Draft science plan framework released
  - Engagement session at Gulf of Mexico Alliance meeting
- Jul
  - NOAA Science Advisory Board (SAB) approves working group for program
- Aug
  - Federal register notice announcing program released
  - Virtual engagement sessions
- Sep
  - Virtual engagement sessions
  - NOAA SAB requests nominations for working group
  - Treasury Department releases draft regulations for RESTORE Act
- Dec
  - Science plan framework released
  - Began science plan scoping and drafting initial federal funding opportunity (FFO)
  - Prepare for financial execution and SAB working group

# 2014 Program Actions

2014

- |            |   |
|------------|---|
| Jan        | • Science plan scoping and initiate program environmental assessment              |
| Jan – Mar  | • Engagement sessions   |
| Mar or Apr | • Science Advisory Board (SAB) working group orientation and discussion           |
| May - Aug  | • Release of initial FFO  |
| Jun        | • Review of draft science plan by Executive Oversight Board and SAB working group |
| Jul        | • Release of science plan for public comment                                      |
| Jul – Aug  | • Virtual engagement sessions on science plan                                     |
| Sept       | • Release completed science plan  |



# Questions?

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*[noaarestorescience@noaa.gov](mailto:noaarestorescience@noaa.gov)*

**Website:**

*[restoreactscienceprogram.noaa.gov](http://restoreactscienceprogram.noaa.gov)*



# Pressing Management Needs

- Understanding climate change and sea level rise impacts on coastal habitats, fisheries, and communities
- Understanding freshwater inflows to estuaries – nutrient and sediment loads, impacts of drought and climate change
- Tools for planning and responding to impacts from climate change and other stressors
- Others? Additional detail?



# Connecting science to management/policy needs

- Coordinate with state agencies
- Engage resource managers and management needs in the proposal process (development and review)
- Centralized data system accessible to resource managers
- Require stakeholder engagement and fund implementation
- Hold workshops among resource agencies to ensure connection and coordination
- Others? Additional details?

# NOAA RESTORE Act Science Program

## *Contact Information*

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# Thank You

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# Backup



# Outline

- Program Overview
- Question and Answer
- Open Session



# Oversight and Responsibility

- Administratively located within NOAA's National Ocean Service in the National Centers for Coastal Ocean Science with cross-agency participation
  - Gulf-based director
  - Program staff from across NOAA and USFWS
- Internal oversight board of senior NOAA and USFWS science leadership
- External advisory working group with NOAA's Science Advisory Board
- Independent external review board will also assess program's effectiveness every 3-5 years





# Coordination

- Deepwater Horizon related science and restoration initiatives including...
  - Gulf of Mexico Research Initiative
  - National Academy of Sciences Gulf Program
  - National Fish and Wildlife Foundation
  - Natural Resources Damage Assessment
  - Other RESTORE Act programs
    - Centers of Excellence (2.5% of Gulf Coast Restoration Trust Fund)
    - Science and monitoring funded by states and Gulf Coast Ecosystem Restoration Council

*This program is independent of these activities, but will coordinate with them.*
- Existing federal and state research programs

# Partners

- **USFWS, GOMFMC, GSMFC** *(consultation required by legislation)*
- **Academic community** *(including RESTORE Act Centers of Excellence)*
- **Federal government partners**
- **State government partners**
- **Private sector** *(i.e., engineering and science contracting firms)*
- **Non-governmental organizations** *(with active research programs/partnerships)*
- **Other research and observing organizations** *(e.g., GCOOS, NAS, GOMRI)*
- **Restoration initiatives** *(e.g., NRDA, NFWF, Gulf Coast Ecosystem Restoration Council)*
- **Elected officials**
- **Others**



# Past Engagement Sessions

- **In-person engagement session prior to the Gulf of Mexico Alliance All Hands Meeting in June 2013**
  - Summary report of comments and input released on our website
- **Sixteen virtual engagement sessions in August and September 2013**
- **The input gathered from these sessions combined with other input we received was used to develop the program's science plan framework and, now, its science plan.**



# Other Engagement Activities

- Many face-to-face meetings with partners
- Presentations at professional conferences
- Participation in webinars and seminars hosted by other organizations
- Briefings to elected officials
- Alerts and announcements sent out to our website subscribers



# Challenges and Opportunities

- The funding uncertainties necessitate that we take a tiered and iterative approach.
- There are several new science initiatives focused on the Gulf of Mexico which when combined with existing science activities represent an extraordinary opportunity.
  - Coordination is key.
- This program is a science initiative *within* the RESTORE Act, not the science initiative for the RESTORE Act.
- There are many research needs in the Gulf of Mexico and this and other related programs will have to prioritize these needs.
  - We need our partners' wisdom and an open process.



## Current Activities

Science Plan scoping

Develop FFO around short-term priorities

## Future Activities

Engagement sessions on focus area priorities

SAB working group orientation and discussion

Prepare science plan for public comment